

Specification Amendments

Replace the paragraph at page 9 lines 16-18 with the following paragraph:

Now consider the situation where S enters the building 14 (position $[[S']] \underline{S}^1$) and wishes to call R1. The phone S again has to make use of the cellular telephone infrastructure 18, 20, 22, and 44 in order to call R1. This again will count as air time for the user S.

Replace the paragraph at page 10 lines 5-16 with the following paragraph:

In the situation of Figure 2, the user of phone S enters the building 14 (position $[[S']] \underline{S}^1$) and comes within range of telephones R1 or R2. Consider the situation where both phone S and phones R1 and R2 all support Bluetooth wireless communications. When S comes within range of R1 and R2, the ability of the phone S to communicate with phones R1 and R2 will be discovered using Bluetooth discovery procedures as set forth in the Bluetooth standards. Using Bluetooth protocol, the user S may initiate a direct communications channel 32 with receiver R1 or (R2) and have essentially free communication with R1 (or R2). The call occurs without any usage of the cellular telephony infrastructure, without any associated charges, and without usage of any available cellular telephone "air time." Cellular resources within the building 14 are also conserved. In Figure 2, the range of the Bluetooth devices is shown by the dashed line 30, and this range may be set by the devices themselves or any available Bluetooth repeaters or other devices to extend the range of individual Bluetooth devices.

Replace the paragraph at page 11 lines 13- 20 with the following paragraph:

Figure 4 is a simplified block diagram of the phone of Figure 3. Multi-mode phones are known in the art (see e.g., U.S. Patent 6,484,027), hence a detailed description is not necessary. The phone 10 includes a cellular telephony antenna 34A, a cellular telephony transceiver 40, and a microcomputer 42 with associated central processing unit and memory. The memory stores program instructions and input characters from the user interface 44. The phone also includes a short-range antenna 34B tuned to the frequency band for the short range wireless network (2.45 Ghz) and associated transceiver 46. The phone 10 also includes audio circuitry 48 for generating audio signals for amplification and projection from a speaker 49 built into the phone.